

Research Questions

The Pew Teens, Video Games, and Civics Survey, the first large study with a nationally representative sample of youth, sheds light on relationships between video game play and civic engagement by measuring the quantity, civic characteristics, and social context of gaming. It explores, in addition, the relationship between the civic characteristics and social context of game play, on one hand, and varied civic outcomes, on the other. In this report, we use the results of this survey to examine how teens' exposure to these civic gaming experiences relates to their civic participation. We define video games as any type of interactive entertainment software, including any type of computer, console, online, or mobile game.

Specifically, we consider:

The Quantity of Game Play Do teens who play games every day or for many hours at a time demonstrate less or more commitment and engagement in civic and political activity? Do they spend less or more time volunteering, following politics, protesting?

The Civic Characteristics of Game Play Do teens who have civic experiences while gaming—such as playing games that simulate

civic activities, helping or guiding other players, organizing or managing guilds (an opportunity to develop social networks), learning about social issues, and grappling with ethical issues—demonstrate greater commitment to and engagement in civic and political activity than those with limited exposure to civic gaming experiences?

The Social Context of Game Play Do teens who play games with others in person have higher levels of civic and political engagement than those who play alone? Does playing games with others online have the same relationship to civic engagement as playing games with others in person? How often do youth have social interactions around the games they play, for example participating in online discussions about a game? How do these interactions relate to civic and political engagement?

The Demographic Distribution of Civic Gaming Experiences Do factors such as gender, family income, race, and ethnicity influence the frequency of civic gaming experiences that members of these groups have? Do certain games provide more of these experiences than others?

Why Study the Quantity of Video Game Play?

Much of the public discourse around game play concerns whether the amount of time youth spend playing “video games” is good or bad. These broad statements do not make meaningful distinctions between the characteristics of particular games or the social context in which they are played. We therefore ask whether the overall quantity of video game play is related to civic and political engagement before considering how the characteristics and context of game play might relate to civic engagement.

Our interest in these questions also reflects analyses that suggest that spending significant time playing video games could lessen the time youth have to spend participating in civic and political life. Indeed, Nie and colleagues found that after controlling for education and income, heavy Internet use was associated with less face-to-face contact with friends, families, and neighbors, particularly when participants used the Internet at home rather than solely at work.²⁴ In a related argument, Robert Putnam notes that what were previously social leisure activities, such as card games, have now been largely replaced by electronic versions and that, “electronic players are focused entirely on the game itself, with very little social small talk, unlike traditional card games.”²⁵ As a result, youth may have less time for civic life, less social capital, and less of the inclination and skills needed for civic engagement.

This perspective, however, is disputed. Some scholars find that Internet use supplements one’s social networks by forging additional connections to individuals whom players would not otherwise know, and several have identified mediating variables, such as motivation, that influence the effect of digital engagement.²⁶ In general, studies of this sort have focused on the Internet broadly (not on video games) and on television. This motivates our interest in the relationship between the quantity of video game play and civic engagement.

Why Study the Civic Characteristics of Video Game Play?

Although game theorists have discussed how the content of video gaming experiences might influence civic outcomes,²⁷ there has been very little empirical research that examines these

relationships. Such research is needed in order to test claims regarding the civic potential of video games and to inform our judgment regarding the likely contribution of particular games and gaming experiences. Moreover, such studies can provide guidance to youth, parents, and educators regarding the desirability of varied games and to game designers who may want to build efficacious features into the games they create.

Although there have been no large-scale quantitative surveys that detail the relationships between the civic characteristics of game play and civic engagement, researchers have identified key features of effective practice in classrooms through controlled, longitudinal, experimental, and quasi-experimental studies in schools and other settings.²⁸ These features include opportunities to

1. Simulate civic and political activities
2. Voluntarily help others
3. Help guide or direct a given organization or group
4. Learn how governmental, political, economic, and legal systems work
5. Take part in open discussions of ethical, social, and political issues
6. Participate in clubs or organizations where young people have the opportunity to practice productive group norms and to form social networks

These activities are believed to support the development of young people's civic and political commitments, capacities, and connections. In so doing, they are believed to foster development of civic identities while increasing levels of civic activity.

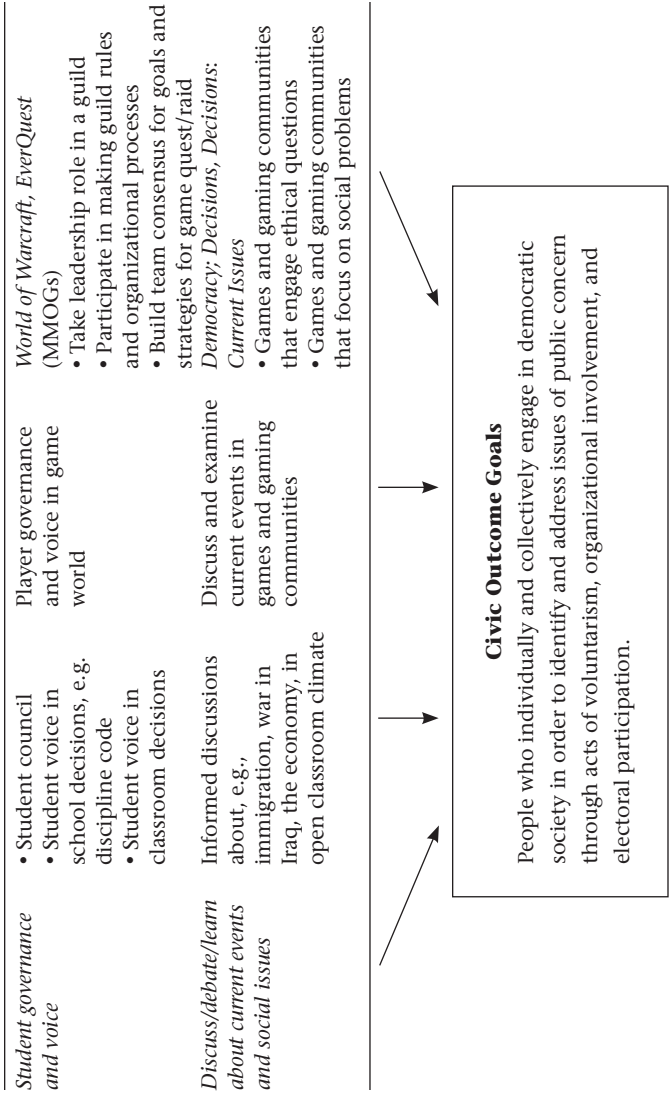
For example, simulations of civic and political activities and learning how government, political, economic, and legal systems work provide young people with the knowledge and skills necessary to participate in the political system.²⁹

However, civic participation requires more than knowledge of how institutions work and how people participate in them. It requires an interest in and commitment to participation, which can be developed, for example, through discussions of social issues and through volunteer work to address those issues.³⁰ It also requires that young people develop confidence in their own abilities (sometimes referred to as a sense of agency) to act as leaders and to work productively for change. To the extent that youth have the opportunity to practice articulating their own point of view, debate issues, and help others in their own communities, they are likely to develop confidence in their ability to do so in the larger civic and political arenas. Finally, civic and political activity is largely a group activity. Youth organizational membership is believed to socialize young people to value and pursue social ties while exposing youth to organizational norms and relevant political and social skills that make maintaining those ties more likely.³¹

The six civic gaming experiences that we attend to in this study closely parallel the six items in this list of “best practices” in civic education.³² In addition, they align with practices that games researchers have identified as occurring in games. Table 1 describes the characteristics of beneficial in-class curricula and those of civic-based games. The *SimCity* inset reveals some of these characteristics in action. We also describe several video games that provide these civic gaming experiences and discuss research that examines their impact.

Table 1
Best practices for fostering civic responsibility

"Best Practice" Civic Learning Experiences	Examples	Civic Gaming Experiences	Examples
<i>Simulations of civic processes</i>	In Social Studies/ Government class • Simulation of legislative debates • Mock trials	Simulations of civic processes in virtual worlds	<i>Civilization, SimCity, Rome Total War</i> • Build new city or civilization • Manage day-to-day operations of city or empire
<i>Instruction in government, history, law, economics, and democracy</i>	Learning about • American Civil War • How a bill becomes a law • Principles of democracy	Games with explicit civic, historical, economic, or legal focus	<i>The Oregon Trail, Carmen San Diego, Zoo Tycoon, Lemnate Stand</i> • Games with historical, government, economic content
<i>Community service learning</i>	As part of school unit, volunteer in • VA hospital • Homeless shelter	Service within a gaming community	• Develop game-related Web site with game tips for others • Help "newbies" with game tasks
<i>Extracurricular activities, school club membership</i>	• Participate in school clubs • Write for school newspaper (structured social environments)	Extra-game world activities (formal and informal game communities)	• Join a game guild • Write for a game-related Web site • Participate in chat discussions with other gamers • Research "mods," cheats



SimCity is a game with explicit civic content in which players design and develop their city, considering such aspects as zoning, land use, taxes, and transportation. Dialogue from an online community provides a sense of the civic thinking required by *SimCity* (see box 1).³³

Box 1**sedimenjerry (Traveler) 5/19 2:26 pm**

HELP!!! I used to have a large city with a population of about 670,000. Now it is about half of that. Why is the population decreasing so much? HELP PLEASE

Maxis92 (Dweller) 3:38 pm

Well, your situation is pretty vague and it could be a number of reasons. Could you give us a brief idea of how your city develop when it was at 670,000 to now (crime rates, education, jobs, commute time, pollution, taxes, etc.)

Hahayoudied (Loyalist) 5:59 pm

We can't shoot your problems in the dark, why not give us some information about your city, and if you have changed it.

sedimenjerry (Traveler) 5/20 1:05 pm

oh sorry that would help. it is on a large city tile and within a half a year (simcity time) it declined sharply. demand is still high for commercial res. and industrial. crime has gone down health is fine garbage has gone down. there are no power or water out-ages. the only thing i can think of is if the latest NAM and RHW downloads have affected it. however i have not built any RHW's in the city. i will try to get a picture of the city

i've noticed that the cities are abandoned due to commute time but ive never had this large of a problem. the first pic is the southern region that has the commute problems. the second is of the industrial area and lake city. the third is downtown. i have plenty of subway systems, bus routes, and roads

Maxis92 (Dweller) 6:35 pm

Yeah, well I can only narrow it down to 2 possibilities. You may need to bring more jobs to your city since I'm seeing a lot of "No Job" Zots. That's probably why your demand is high for more commercial jobs. You can do this by placing plenty of plazas and rewards in your business districts. Also, the commute timing will destroy any city, If your sims (especially the wealthy ones) can't find a job only so many minutes from their home, they will quit and probably move elsewhere. Sometimes your subway and bus system may not be efficient and you probably need to fix it or add other alternatives such like an el-trains or a monorails.

[the conversation continues]

sedimenjerry (Traveler) 5/21 12:18

thanks guys its getting larger now

One example of a popular video game with civic content is *Civilization IV*. Players begin with an undeveloped piece of land and a group of settlers. They must make decisions about how to build a city and when to send out scouts to explore surrounding territories, and they must develop warriors to protect the city. Players begin in the Stone Age and move all the way to the

twenty-first century. In the process, they make a range of decisions about when to introduce reading, religion, and the printing press. They negotiate trade agreements and at the same time are responsible for the day-to-day political and financial governance of the city. Through this simulation, participants have opportunities to learn about the dynamics of economic, political, and legal systems. Engaging in this way also provides opportunities for participants to develop a civic identity as they see and experience themselves as civic leaders. Indeed, research in social psychology finds that such opportunities lead individuals “to adopt attitudes and cognitions consistent with the behaviors they are acting out.” In addition, those engaging in the simulation have opportunities to practice and develop civic skills.³⁴

A qualitative study by Kurt Squire and Sasha Barab explored how students used *Civilization III* (the previous version of *Civilization IV*) in a history class to test hypotheses about the influence of such forces as trade, natural resources, and political alliances on historical events. With guidance and support, students began to appropriate the game for their own educational (and social) purposes.³⁵ They developed questions and used the game to test hypotheses by changing their decision-making strategies in the game and seeing what then happened.

The Squire and Barab study suggests that young people can show gains in political and civic knowledge from playing a commercial video game such as *Civilization*. However, this occurred in a context where adults guided and shaped the experiences with specific educational goals. It is less clear whether young people who simply play *Civilization* will have the same kinds of civic gaming experiences.

In addition to commercially designed games, media researchers have developed games with an explicit educational focus. For example, *Quest Atlantis*, created as a school-based educational simulation, embeds civic learning opportunities in the game's play-based educational tasks. Users are youth aged 9 to 12 who participate through their elementary schools or after-school programs.

Players embark on "Quests" to the fictional world of Atlantis, which may consist of an online educational activity or be linked to a real world activity. Atlantis has been taken over by leaders whose emphasis on progress has contributed to a severe environmental, moral, and social decline. The quests are to help find solutions to the many problems facing Atlantis. Quests are aligned with educational standards and a set of social commitments so that students understand the concepts explored in *Quest Atlantis* as well as the impact this knowledge has on their communities. For example, a student might be asked, as part of the focus on developing a social commitment to environmental awareness, to identify an animal that lives in the student's area and to learn about the animal's habitat. The player then would write a short story based on the information and share it with the online council of Atlantis.

The game has features that align with "best practice" in civic education, including simulating civic, political, and economic processes and researching and discussing personally relevant social issues. It also provides children with opportunities to discuss the ethical implications of different actions, learn skills needed to create change around those issues, and connect to others who are working on the same issue. Moreover, the pro-

cess of playing such games is social and provides opportunities for young people to work collaboratively toward common goals and to express their voice—helping to guide both the strategies that groups of players employ and the way the game itself is played. Finally, *Quest Atlantis* includes a narrative story line using prosocial male and female teen protagonists to help young people understand the purpose behind some of their activities and the interconnections among various activities.

Barab and colleagues have completed several studies that find learning gains from *Quest Atlantis* in science, social studies, and language arts. In social studies, they find significant improvement in students' appreciation for how history relates to their own lives and the ability to adopt multiple perspectives in decision making on international issues.³⁶

Although evidence indicates that games can be used productively in an educational setting with some adult intervention and reflection, it is less clear whether gaming in a more typical context, alone or with peers, yields similar benefits. Some argue, however, that with certain design features, games can facilitate powerful civic learning experiences without adult intervention.³⁷

Why Study the Social Context of Video Game Play?

Just as prior research by civic educators supports a possible link between certain civic characteristics of video games and civic engagement, the social context of the gaming experience may also be linked to civic engagement. Several well-controlled, longitudinal studies find that adolescents' participation in extracurricular clubs and organizations predicts later civic

engagement.³⁸ This participation is believed to foster social networks and to socialize young people to value and pursue social ties. These experiences also expose members to organizational norms and relevant political and social skills that enable them to maintain these ties.

Thus, if game playing leads to isolation or to integration into gaming communities with antisocial norms, one might expect less civic engagement or connection. On the other hand, to the extent that games are played with others or integrate youth into vibrant communities where healthy group norms are practiced and where teenagers' social networks can develop, games might well develop social capital. Many massively multiplayer online games (MMOGs), for example, do not have explicitly civic or political characteristics, but they require the ongoing and sustained cooperation of a group of people to play. This cooperation can potentially offer teens practice in identifying shared goals, negotiating conflict, and connecting with others who are not part of their daily lives.³⁹

Thomas and Seely Brown point out that games such as *World of Warcraft* "involve the experience of acting together to overcome obstacles, managing skills, talents, and relationships and they create contexts in which social awareness, reflection, and joint coordinated action become an essential part of the game experience."⁴⁰ Such opportunities can, as Constance Steinkuehler and Dmitri Williams argue, provide a "third place" or form of civil society and civic skill learning.⁴¹ These dynamics lead Jenkins to ask, "who's to say video games are not serving the same purpose that bowling leagues used to provide, where people develop a sense of social responsibility and participa-

tion.”⁴² Some empirical studies have examined these dynamics, but as yet no clear findings have emerged.⁴³

Youth have many opportunities to actively engage around the more popular games, including, as Mimi Ito suggests, the creation of “cheats, fan sites, modifications, hacks, walk-throughs, game guides, and various Web sites, blogs, and wikis.”⁴⁴ These enable players to discuss the game, learn about game options, give tips, and ask for advice. They also provide ways to sidestep the formal constraints of the game and customize or personalize the gaming experience. Integral to these activities are the opportunities for more experienced players, regardless of age, to take on leadership roles and to help others. The impact of these forms of participation is not yet clear.

Finally, one unique quality of the social nature of game play is that much of it takes place without geographic proximity or face-to-face contact. Although young people can play games together in the same room, new technology makes it possible to play games in highly interactive ways without ever meeting in person. It is unclear whether such online social interaction provides the same opportunities to forge social connections as face-to-face recreational activities.⁴⁵ All of these unanswered questions lead us to examine more closely the social context of video game play.

Why Study the Demographic Distribution of Civic Gaming Experiences?

Having identified potentially relevant gaming characteristics and social contexts, we next wanted to assess the prevalence

and distribution of such opportunities. At the most basic level, we wanted to understand how common these opportunities are. In addition, it is important to consider the “digital divide” in relation to political participation.⁴⁶ Karen Mossberger, Caroline Tolbert, and Ramona McNeal find, for example, that Internet use furthers civic participation but that key kinds of Internet use are unequally distributed and that these inequalities parallel other inequalities in the broader society.⁴⁷ We therefore chose to examine whether the digital divide applied to civic gaming experiences. This interest also sprang from our recent findings that white, academically successful children from families with higher education and income have significantly more opportunities for civic learning in school as part of their general curricular and extracurricular activities.⁴⁸ In short, we wondered whether the distribution of civic gaming experiences in video games might propagate (or perhaps help redress) the inequalities in civic learning opportunities that exist elsewhere in the society.